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09/983,072	10/23/2001	Prabhakar Kallanayakanahalli Somashekaraiah	P56502	8884

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EXAMINER

THAI, CUONG T

ART UNIT	PAPER NUMBER
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2173

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4/L

## Office Action Summary

Application No.

09/983,072

Applicant(s)

SOMASHEKARAI AH, PRABHAKA  
KALLANAYAKANA

Examiner

CUONG T THAI

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on November 23, 2004 Amendment.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 6-13 and 17-20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **PART III. DETAILED ACTION**

1. This action is responsive to Amendment A filed on November 23, 2004. The prosecution is hereby REOPENED.

2. Claims 1-3, 5-15 and 17-20 are presented for examination. Claims 4 and 16 have been canceled.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentably over Van Cruyningen (USPN: 5,805,167) in view of Applicant's submitted prior art issued to Okura Yukiko et al. (JP 08-140003) hereinafter Okura Yukiko.

As per claims 1 (system) and 14 (method), Van Cruyningen anticipated discloses a device including a display section for displaying a video signal, comprising:

an on-screen display generating section for generating a menu matrix having a plurality of a menu icons arranged in a plurality of rows and columns on the display section, the plurality of menu icons being individually selectable for enabling a user to adjust a display state of the display section is taught by Van Cruyningen as the technique of menu icons 50-61 have been arranged in plurality of rows and columns on the display screen 40 (see Fig. 2), wherein menu

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items 50, 51, 52 and 55 are a group of very frequently used edit commands that almost every application supports (see col. 7, lines 58-60);

a key inputting section adapted to allow a user to select any desired one of the plurality of menu icons is taught by Van Cruyningen as the technique of an operator can create specific menus for individual applications. Each application can have several different popup menus that are accessible through different trigger events. It is very useful to have additional popup menus not only for more application control, but also for specialized data or symbol entry (see col. 9, lines 56-61); and

a control section adapted to control a pointer so that the pointer is initially positioned at a menu icon in the central region of the menu matrix upon the initial display of the menu matrix, the pointer indicating a menu icon selected through the key inputting section is taught by Van Cruyningen as the technique of in the preferred embodiment of the invention has a keyboard interface. The trigger event is a press of a specific key, often in combination with a modifier key. The gesture is performed by holding down or repeatedly pressing arrows keys (see col. 9, lines 33-36) and access or mnemonic keys allow quick selection of a particular item in the current menu, while shortcut or accelerator keys allow quick selection of an item in the current menu or any sub menus thereof (see col. 9, lines 39-43), and **allowing operators to customize the menus, put the menu design tools in the hands of those who best known which commands and symbols they use most frequently** (see col. 10, lines 39-42) .

Van Cruyningen, however, does not disclose the limitation of said control section determining a frequency of use for each of the menu icons selected by a user via the key

inputting section and disposing the menu icon having highest frequency of use at the central region of the menu matrix where the pointer is initially positioned.

Okura Yukiko discloses the limitation of said control section determining a frequency of use for each of the menu icons selected by a user via the key inputting section and disposing the menu icon having highest frequency of use at the central region of the menu matrix where the pointer is initially positioned as the techniques of along the upper side of a display screen, the five categories of NEWS, MOVIE, SPORTS, POLITICS and MUSIC are displayed. Along the left side of the display screen, the slave screen of the programs of the broadcastings channels most frequently received in the past four weeks belonging to the category displayed on a left side are successively displayed from a top to a bottom in the descending order of frequency and the desired category is selected by performing an operation for moving a cursor K in a horizontal direction and the desired slave screen is selected by performing the operation for moving the cursor K in a vertical direction. When the desired slave screen is selected, the pictures of the broadcast channel specified by the slave screen are displayed as a master screen (see abstract and see Fig. 16).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include Okura Okiko's teaching of said control section determining a frequency of use for each of the menu icons selected by a user via the key inputting section and disposing the menu icon having highest frequency of use at the central region of the menu matrix where the pointer is initially positioned into that of Van Cruyningen's invention. By doing so, the system would be enhanced by capable of allowing user option for selecting channels among those categories based on user's most interest and based on the cursor initially positioned over

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channel for displaying that channel over the master screen window comparing to other channels.

Thus, the system would be enhanced by providing maximum screen estate to its end user.

As per claim 2, the limitation of wherein control section controls the adjustment of the display state of the display section according to an input signal from the key inputting section is taught by Van Cruyningen as the technique of **allowing operators to customize the menus, put the menu design tools in the hands of those who best known which commands and symbols they use most frequently** (see col. 10, lines 39-42).

This claim is therefore rejected for the reasons as set forth above.

As per claims 3 (system) and 15 (method), the limitation of wherein the plurality of rows of the menu matrix includes at least three rows is taught by Van Cruyningen as the technique of menu icons 50-61 have been arranged in four row (see Fig. 2). These claims are therefore rejected for the reasons as set forth above.

As per claim 5, Van Cruyningen discloses the invention substantially as claimed above. Van Cruyningen, however, does not disclose the limitation of disposes the remaining menu icons around the central region of the menu matrix so that those of the menu icons having higher frequencies of use are arranged closer to the central region of the menu matrix than those of the menu icons having lower frequencies of use.

Okura Yukiko discloses the limitation of the remaining menu icons around the central region of the menu matrix so that those of the menu icons having higher frequencies of use are

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arranged closer to the central region of the menu matrix than those of the menu icons having lower frequencies of use as the technique of the when the desired slave screen is selected, the pictures of the broadcast channel specified by the slave screen are displayed as a master screen comparing to programs along the left side slave screen of the display screen of the programs of the broadcastings channels most frequently received in the past four weeks belonging to the category displayed on a left side are successively displayed from a top to a bottom in the descending order of frequency (see abstract and see Fig. 16)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include Okura Yukiko's teaching of selected program which having higher frequency of use is arranged closer to the central region of the master screen than those of the channels icons having lower frequencies of use into that of Van Cruyningen's invention. By doing so, the system would be enhanced by capable of allowing user mainly focus on the highest priority menu, while other less priority menus are shrink farther away from the user.

#### *Allowable Subject Matter*

5. Claims 6, 7 and 17-20 are objected as being dependent upon a rejected based claim, but would be allowable if rewritten in independent form including all of the limitations of the based claim and any intervening claims.

6. The following is an Examiner's statement of reasons for allowance:

Examiner has carefully considered claims 6 and 7 of the presented application. Claim 17 is objected for the same reasons applied to claim 6 except for method instead of system claim.

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Claims 8-13 are further limits depend on objected claim 7. Claims 18-20 are further limits depend on objected claim 17. None of the cited arts of records discloses, suggest, nor teaches a display device including a display section for displaying a video signal comprising a control section wherein the control section disposes the four menu icons having the frequencies of use closest in frequency to the menu icon having the highest frequency of use adjacent to said menu icon having the highest frequency of use **in an order of right, top, left and bottom sides of said menu icon having the highest frequency of use** (see claim 6) nor a display device including a display section for displaying a video signal comprising a key inputting section wherein the key inputting section comprises a plurality of directional keys, and **each menu icon is reachable from said menu icon in the central region of the menu matrix through a corresponding predetermined number of incremental steps in response to the user's manipulation of said directional keys, those menu icons farthest away, geometrically, from said menu icon in the central region of the menu matrix requiring the most amount of incremental steps to be reached** (see claim 7). The prior arts of record including patent issued to Van Cruyningen and Okura Yukiko disclose a method and apparatus for using directional gestures in pop up menu as well as events trigger by specific keys and patent issued to Miller discloses the method wherein the operator has capable of determining the degree of frequently of used of documents and placing those frequently of use documents around the most priority document. None of them, however, discloses nor suggest a display device includes a control section disposes the four menu icons having the frequencies of use closest in frequency to the menu icon having the highest frequency of use adjacent to said menu icon having the highest frequency of use **in an order of right, top, left and bottom sides of said menu icon having the highest frequency of use** nor a display



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device including a display section for displaying a video signal comprising a key inputting section wherein the key inputting section comprises a plurality of directional keys, and each menu icon is reachable from said menu icon in the central region of the menu matrix through a corresponding predetermined number of incremental steps in response to the user's manipulation of said directional keys, those menu icons farthest away, geometrically, from said menu icon in the central region of the menu matrix requiring the most amount of incremental steps to be reached.

7. Applicant's arguments filed on November 23, 2004 have been fully considered, but they are not persuasive.

On the third paragraph of page 9, Applicant argues that "None of the menu icons in Van Cruyningen are for adjustment of the display state of the display section". The Examiner, however, does not agree to this argument since Van Cruyningen discloses " adjustment of the display state of the display section" as the technique of if the application will be used frequently, the operator has the option of designing a new menu description for that application. The new menu description can be placed anywhere in a range or hierarchy of access rights so it is made available only for personal use (private), available to any member of a group of operation (group access), or to be available to all operators on the system (public access) (see col. 4, lines 9-16).

On the last paragraph of page 9 to the first paragraph of page 10, Applicant argues that "the amendment to claims 1 and 14 incorporate the features of claims 4 and 16, respectively,

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thereby rendering the rejection moot, since neither of claims 4 and 16 were rejected under § 102”. The Examiner, however, does not agree to this argument since Okura Yukiko discloses the limitation of “disposing the menu icon having highest frequency of use at the central region of the menu matrix where the pointer is initially positioned” as the technique of when the desired category is selected by performing an operation for moving a cursor K in a horizontal direction and the desired slave screen is selected by performing the operation for moving the cursor K in a vertical direction. When the desired slave screen is selected, the pictures of the broadcast channel specified by the slave screen are displayed as a master screen (see abstract and see Fig. 16). By doing so, the system would be enhanced by maximizing the highest priority window on the screen. Thus, it would notify user what window is need to be focused on.

On the third paragraph of page 10, Applicant argues that “First, Miller, like Van Cruyningen, fails to teach a plurality of menu icons being individually selectable for enabling a user to adjust a display state of the display section”. The Examiner, however, does not agree to this argument since Van Cruyningen discloses the limitation of “for enabling a user to adjust a display state of the display section” as the technique of if the application will be used frequently, the operator has the option of designing a new menu description for that application. The new menu description can be placed anywhere in a range or hierarchy of access rights so it is made available only for personal use (private), available to any member of a group of operation (group access), or to be available to all operators on the system (public access) (see col. 4, lines 9-16).

On the last paragraph of page 10, Applicant argues that “ Nor is the document that is displayed on the display panel 260 (the central panel) displayed because it is the document having the highest frequency of use”. The Examiner agree with Applicant that Miller lack of the teaching of “document displayed on the display panel having the highest frequency of use”. However, Okura Yukiko discloses the limitation of “disposing the menu icon having highest frequency of use at the central region of the menu matrix where the pointer is initially positioned” as the technique of when the desired category is selected by performing an operation for moving a cursor K in a horizontal direction and the desired slave screen is selected by performing the operation for moving the cursor K in a vertical direction. When the desired slave screen is selected, the pictures of the broadcast channel specified by the slave screen are displayed as a master screen (see abstract and see Fig. 16).

On the second paragraph of page 11, Applicant argues that “Accordingly, neither reference teaches determining a frequency of use of each of the menu icons selected by a user to adjust a display state and setting the menu icon having the highest frequency of use as said default menu icon”. The Examiner, however, do not agree to this argument since Okura Yukiko discloses the limitations of “determining a frequency of use of each of the menu icons selected by a user to adjust a display state and setting the menu icon having the highest frequency of use as said default menu icon” as the techniques of along the upper side of a display screen, the five categories of NEWS, MOVIE, SPORTS, POLITICS and MUSIC are displayed. Along the left side of the display screen, the slave screen of the programs of the broadcastings channels most frequently received in the past four weeks belonging to the category displayed on a left side

are successively displayed from a top to a bottom in the descending order of frequency and the desired category is selected by performing an operation for moving a cursor K in a horizontal direction and the desired slave screen is selected by performing the operation for moving the cursor K in a vertical direction. When the desired slave screen is selected, the pictures of the broadcast channel specified by the slave screen are displayed as a master screen (see abstract and see Fig. 16).

On the third paragraph of page 11, Applicant argues that “Beside, the claimed feature is directed toward menu icons, not a current document being worked on”. The Examiner, however, does not agree to this argument since Okura Yukiko discloses the citation of “directed toward menu icons” as the technique of along the upper side of a display screen, the five categories of NEWS, MOVIE, SPORTS, POLITICS and MUSIC are displayed. Along the left side of the display screen, the slave screen of the programs of the broadcastings channels most frequently received in the past four weeks belonging to the category displayed on a left side are successively displayed from a top to a bottom in the descending order of frequency and the desired category is selected by performing an operation for moving a cursor K in a horizontal direction and the desired slave screen is selected by performing the operation for moving the cursor K in a vertical direction. When the desired slave screen is selected, the pictures of the broadcast channel specified by the slave screen are displayed as a master screen (see abstract and see Fig. 16). The five categories of NEWS, MOVIE, SPORTS, POLITICS and MUSIC are program icons of broadcasting channels.

### ***Conclusion***

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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CUONG T THAI whose telephone number is (571) 272-4056.

The examiner can normally be reached on 8:00 am - 4:00 pm.

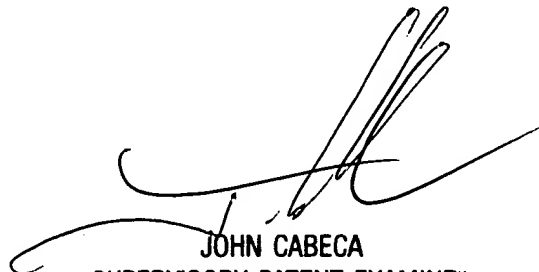
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CUONG T THAI  
Examiner  
Art Unit 2173

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March 18, 2005.



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